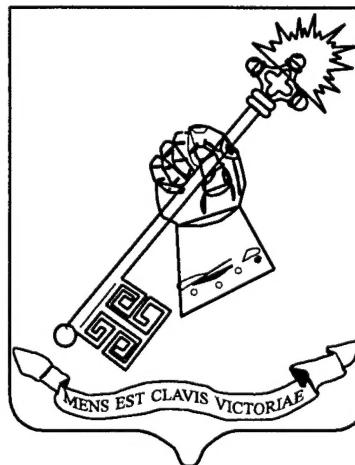


**OBJECTS IN MIRROR ARE
CLOSER THAN THEY APPEAR:
Population Growth and
the U.S. Army**

A Monograph
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Abstract

OBJECTS IN MIRROR ARE CLOSER THAN THEY APPEAR: POPULATION GROWTH AND THE U.S. ARMY by MAJ Marion L. Miles, Jr., USA, 53 pages.

This monograph examines the influence of population growth in the developing world on the U.S. Army's mission within the national security strategy. The U.S. military in general and the U.S. Army in particular will not be the only, or even the most important, component of the U.S. response to the population problem. However, there will be certain aspects of the strategic threats posed by population growth that will require a military response.

This monograph first examines the demographic environment to determine why population growth is a national security issue. Second, the military component of the population growth issue is investigated. Third, this monograph examines whether the U.S. Army is prepared, and if not, why not. Next, changes in organization and training are considered.

Finally, this monograph shows that the demographic environment of the world in the first decades of the twenty-first century is likely to have as great an impact on how Americans perceive their lives as any threat on the strategic horizon. The U.S. Army's relevancy to Americans may have little to do with destroying enemy formations or seizing ground. Instead, the U.S. Army's relevancy to Americans may have a lot to do with stemming the flow of migrants at their point of origin and preventing a disrupting number of economic migrants from reaching the United States.

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I. Introduction

The idea of writing a paper about population growth grew out of reading Bernard Brodie's book, Strategy in the Missile Age. Writing for the RAND Corporation in the late 1950's, Brodie articulated a strategic deterrence theory as the U.S. military began to deploy missiles with thermonuclear warheads. The enduring legacy of Brodie's work is that much of his strategic deterrence theory survives today, thirty-seven years later. Yet, after writing over four hundred pages on the development of strategic air power and grappling with the issues of nuclear warfare, Brodie concludes his book with a warning about uncontrolled population growth.¹

Brodie was communicating to his audience the need to ponder the fundamental ideas about waging war. This paper will do that in seeking to answer the research question: What influence will population growth in the developing world have on the U.S. Army's mission within the national security strategy? This paper recognizes that the U.S. military in general and the U.S. Army in particular will not be the only, or even the most important, component of the U.S. response to the population problem. However,

there will be certain aspects of the strategic threats posed by population growth that will require a military response.

As this paper is being written, America is existing peacefully with the other nations of the world, including potential adversaries.² Without the threat from the Warsaw Pact, the U.S. military is rethinking its strategy and reducing its force structure. This has been accompanied by a reduction in the U.S. military's budget in real terms of about forty percent from the mid-1980's to the mid-1990's.³

Michael Howard wrote some years ago that in an age of peace the military operates in a void since its calculations about war cannot be confirmed.⁴ Howard contrasts the military professional who, during an age of peace, does not get feedback on the doctrine for waging war and on how weapons should be employed with the natural scientist who can confirm a hypothesis through experiments in the physical world. The military professional therefore usually extrapolates from the last war about how war in the future will be fought. The farther removed from the last war, the greater the chance for miscalculation by the military professional about waging war in the future.

The present situation in which the U.S. Army finds itself is analogous to Howard's description of the challenges a professional military finds in an age of peace. The U.S. Army is conceptualizing how it will fight in the 21st century through the Force XXI initiative.⁵ Although the U.S. Army has simulations to test the concepts of Force XXI, these simulations model our vision of future war and may not reflect the physical world we find in the 21st century. Put differently, Force XXI reflects many judgments and decisions made in the past and thus may not be as visionary as it purports.⁶

So, this paper will evaluate other conceptions as to what will be the U.S. Army's mission in the 21st century. This paper will use four questions to answer the research question. First, why is population growth a national security problem? Second, what is the military component of this issue? Third, is the U.S. Army prepared and, if not, why not? Finally, what changes in organization and training are necessary? The answers to these questions will support this paper's conclusions about the impact of population growth on the U.S. Army's mission in the 21st century.

II. The Demographic Environment

America's National Security Strategy discusses the requirement to deter, and if necessary, fight and defeat potential adversaries such as North Korea, Iran, and Iraq.⁷ Further, the security strategy states the necessity of maintaining a large enough force to fight two regional opponents nearly simultaneously.⁸ More ominously, the strategy considers the possibility of fighting a more capable opponent or a coalition of opponents in which we will need a "two war" force to prevail.⁹ This portion of the National Security Strategy would seem congruent with many of the concepts in the U.S. Army's Force XXI initiative.

However, read a few more pages of the National Security Strategy and the reader will come to a few seemingly innocuous sentences near the end of a segment on the environment. "A conservative estimate of the globe's population projects 8.5 billion people on the planet by the year 2025. Even when making the most generous allowances for advances in science and technology, one cannot help but conclude that population growth and environmental pressures will feed into immense social unrest and make the world

substantially more vulnerable to serious international friction."¹⁰

What does this statement mean?

Examining some population numbers helps to clarify this statement from the National Security Strategy. The planet currently has 5.7 billion inhabitants and is adding approximately 93 million more people each year.¹¹ In addition to the 8.5 billion population figure for the year 2025, by the year 2050 the world community will contain around 10 to 11 billion world citizens.¹² By the year 2025 India is expected to rival China as the most populous nation on earth, with a population of 1.4 billion people to China's 1.5 billion people.¹³ Also, by the year 2025 other key developing nations will have the following populations: Nigeria with 301 million, Pakistan with 267 million, Indonesia with 263 million, Brazil with 245 million, Mexico with 150 million, and Iran with 122 million.¹⁴ Ninety-five percent of the population growth by the year 2050 is expected to occur in the developing countries.¹⁵

Population growth in cities will be even more spectacular. About forty percent of the developing world's population is expected to be living in cities by the year 2000, and to increase to fifty-seven percent by 2025.¹⁶ By the beginning of the twenty-first

century, four years from now, Sao Paulo is projected to have a population of 22.6 million, Bombay 18.1 million, Shanghai 17.4 million, Mexico City 16.2 million, and Calcutta 12.7 million.¹⁷ There will be twenty cities in the world by the year 2000 with populations of at least eleven million and seventeen of those cities will be in the developing world.¹⁸

In addition to the enormity of the numbers, the portion of the world's population in the developing countries is increasingly young. In 1993, fifty-two percent of Kenya's population was fifteen years old or younger.¹⁹ In 1992, seventy percent of Algeria's population was under thirty years of age.²⁰ In 1993, six out of ten Egyptians in a population of 55 million was under twenty years of age; Egypt is currently adding one million newborns every eight months.²¹ Moreover, fertility rates in Nigeria are 7.0 percent, in Syria are 7.8 percent, and in Rwanda are 8.3 percent.²² In several North African cities today, unemployment among young men runs between forty percent and seventy percent.²³ These large adolescent populations are located in regions where their governments and economies are unlikely to find the money to provide education and jobs; and consequently frustration is likely to be high among the young.²⁴

The "immense social unrest" mentioned earlier in the excerpt from the National Security Strategy is not likely to be simply unrest in a developing country's locale. Prompted by an increasing economic gap between the developed nations and the developing nations, migration of populations is likely to cause social unrest in the developed world. Again, some numbers will be illustrative. The southern tier of European states; Spain, Portugal, France, Italy, and Greece will increase their combined populations by 4.5 million between 1990 and 2025.²⁵ The northern tier of African states; Morocco, Algeria, Tunisia, Libya, and Egypt will increase their combined populations by 107 million between 1990 and 2025.²⁶ The United States will increase its population by twenty-nine percent by 2025 if legal immigration remains constant.²⁷ In the same period, Mexico's population will increase by sixty-three percent and Guatemala's population will increase by one hundred thirty-five percent.²⁸

The demographic statistics from the preceding paragraphs imply political and economic consequences. Vice President Al Gore said several years ago:

"We would not be here today if we were not convinced that the rapid and

unsustainable growth of the human population was an issue of utmost urgency. It took 10,000 generations for the world's population to reach two billion people. Yet over the past fifty years, we have gone from two billion to more than five and a half billion. And we are on a path to increase to nine or ten billion over the next fifty years. Ten thousand generations to reach two billion and then in one human lifetime -- ours -- we leap from two billion toward ten billion."²⁹

Sub-Saharan Africa vividly illustrates the Vice President's point. In 1930 Sub-Saharan Africa had a population of 130 million people.³⁰ By 1994 Sub-Saharan Africa's population exceeded 500 million people.³¹ The World Bank estimates Sub-Saharan Africa's population will grow to over a billion in the next twenty-five years, and in all likelihood reach 1.5 billion by the year 2030.³² Thus, in the 100 years between 1930 and 2030, Sub-Saharan Africa will have had an exponential increase in population.

Exponential population growth belies the argument that fertility management alone will alleviate the world's burgeoning population increase. When people think of growth they generally think in linear terms where the increase is by a constant amount, like the corn stalk that grows four inches a month or the young child

that grows several inches each year. Exponential growth is like the familiar banking term compound interest. Exponential growth occurs when some quantity of something grows by a constant percentage of the whole quantity. The concept of exponential growth can be demonstrated on the reader's own fingers. Take the number one and double it, then take two and double it to four and double four to eight. By the time the reader reaches the tenth doubling the number has become one thousand. The twentieth doubling will reach one million and by the thirtieth doubling the reader will reach one billion. The world's population reached four billion in 1975 and is in its thirty-third doubling.³³

A concrete example of exponential growth can be found in Africa. Today the population of Nigeria is 113 million, by 2025 Nigeria's population is projected to expand to 301 million.³⁴ Today the population of Zaire is 36 million, by the year 2025 the population of Zaire is estimated to be 99 million.³⁵ Today Kenya's population is 25 million, by 2025 the population of Kenya is projected to grow to 77 million.³⁶ Today the population of Tanzania is 27 million, the population of Tanzania is projected to increase to

84 million by the year 2025.³⁷ This exponential growth in population is occurring without a corresponding increase in resources.

One measure of the resources within a nation is the Gross National Product (GNP) per capita. The World Bank classifies low income economies as those with a GNP per capita of \$695 or less.³⁸ The World Bank designates middle income economies as those with a GNP per capita of more than \$695 but less than \$8,626.³⁹ The World Bank terms high income economies as those with a GNP per capita in excess of \$8,626.⁴⁰ For convenience, the World Bank classifies low and middle income economies as developing and high income economies as developed. This classification does not imply all economies within a classification are developing in the same way or that other economies have reached a desired state of development.

Although the reader may think that the link between population growth and slow economic development is intuitively obvious, only recently has a study been completed which indicates this link. "A statistically significant and quantitatively important negative impact of population growth on the rate of per capita output growth appears to have emerged in the 1980's."⁴¹ The study found that high rates of population growth are linked to an approximately twenty

percent reduction in the rate of growth for a developing nation's Gross Domestic Product (GDP) per capita.⁴² The study also found that high rates of population growth wield a sizable negative impact on savings in developing nations.⁴³ This study casts population growth in a new light by demonstrating the association between high rates of population growth and diminishing economic performance.

Again turning to Africa to illustrate the scope of the challenge, among the best performing African economies, population growth exceeds their economies' ability to reduce poverty significantly over the next twenty to thirty years.⁴⁴ Taking Africa as a whole, from 1990 to 1992 Africa's GDP grew at 2.1 percent while in the same period its population growth rate was over 3 percent.⁴⁵ Africa's high level of international debt exacerbates the difficulties of keeping national economies growing apace with an increasing population. In 1992, Africa's debt was equivalent to 93 percent of its GDP and debt service consumed 32 percent of the year's earnings from exports.⁴⁶

The scene emerging from the population growth statistics in the developing world is quite serious apart from any scarcity of food issue. The increase of adolescent populations in economies

incapable of providing adequate numbers of jobs is disrupting.⁴⁷

Developing nations barely able to cope economically are besieged with new demands being placed upon them by their increasing populations.

III. The Military Component

Richard M. Nixon wrote more than a few years ago that, "Poverty and bad government are nothing new."⁴⁸ What is new is that there are 1.5 billion radios and more than 600 million television sets in the world.⁴⁹ The millions of poor people in the world can see how the relatively wealthy people on the planet live. This has created enormous frustration throughout the developing world.⁵⁰

The very poor people on the planet have increased over the past ten years from roughly 700 million to something over 1 billion.⁵¹ Phrasing this another way, approximately one in six world citizens have an income of less than a dollar a day.⁵² To illustrate this point, around 20 million people die each year from hunger and poverty related causes; put in even more graphic terms, that is 40,000 people dying each day or 1,700 people dying each hour.⁵³ The

disparity in economic statistics between developing and developed countries continues to increase.⁵⁴

The developed countries contain a small percentage of the world's population and yet they currently consume approximately eighty-five percent of the planet's resources.⁵⁵ Again, an example will be helpful. A child born in a developed country will consume thirty times the amount of resources of all kinds as a child born in a developing country such as Bangladesh.⁵⁶ Moreover, if all the countries of the world consumed oil and coal at the levels of the developed world, known oil reserves would last two years and coal supplies would last less than 100 years.⁵⁷ Another illustration of this point is that spending on the consumption of cosmetics, hair care, and disposable diapers by the U.S. is equal to the combined GDP of Costa Rica, El Salvador, Honduras, and Nicaragua.⁵⁸

The contradictions in demographics and economics between the developing and developed world are significant. Areas of the globe are experiencing economic growth that is unable to provide a standard of living to their increasing populations that even approximates the developed countries standard of living. Other areas of the globe are experiencing economic growth that maintains

the relatively high standard of living for their stable populations. Given finite resources on the planet, simple math would seem to show the unlikelihood of all the world's citizens being able to enjoy a standard of living commensurate with the citizens of the developed countries.⁵⁹

Tying these demographic and economic trends to an increased access to modern communications allows the poor and very poor people of the planet to migrate with the knowledge that life is better somewhere else. As Matthew Connelly and Paul Kennedy point out in an article in The Atlantic Monthly:

"One such occasion was in the summer of 1991, following media reports about the thousands of desperate Albanians who commandeered ships to take them to the Italian ports of Bari and Brindisi, where they were locked in soccer stadiums by the local police before being forcibly returned to a homeland so poor that it is one of the few parts of Europe sometimes categorized as 'developing' countries. Apparently, one reason for this exodus was that the Albanians had been watching Italian television -- including commercials for consumer goods, cat food shown being served on a silver platter, and the like."⁶⁰

Connelly and Kennedy provide other similar examples of migration in the same article. What their examples demonstrate is that migration is an attempt by the increasing number of poor people in the developing countries to overcome the inequitable distribution of both economic opportunities and natural resources.⁶¹

The U.S. appears to be experiencing an increase in migration. There are no precise statistics on total migration numbers, although some estimates maintain that as many as 3 million undocumented migrants are entering the United States per year.⁶² One recent study on the linkage of population growth and migration into the U.S. was forced to limit its scope because there were no reliable statistics for undocumented migration. Nevertheless, the study was revealing in one respect. Between 1989 and 1993, 43.9 percent (2,780,118) of the total of 6,332,843 permanent immigrants to the U.S. have been undocumented migrants who were applying for a regularized status under the provisions of the Immigration Reform and Control Act of 1986.⁶³

If the State of California may be used as an example, one estimate is that the cost of undocumented migrants in that state in 1993 was \$2.3 billion.⁶⁴ There are also socioeconomic costs such as

public health, education, smuggling, and street violence. Given this, in November of 1994 the voters of California approved Proposition 187 by a three to two ratio at the ballot box.⁶⁵ Proposition 187 bars undocumented migrants from receiving publicly funded health care except in emergencies, and prohibits the children of undocumented migrants from attending public schools.⁶⁶

People will continue to migrate and transform the places they live, and do both with fervor. The central issue the U.S. government will face is how much will unwanted migration threaten U.S. security interests. A consensus appears to be emerging that, however deplorable living standards are in the migrants' countries, the U.S. cannot accept them all. The result of this emerging consensus is the likelihood that controlling migration will become more of a priority.⁶⁷

The U.S. military's likely involvement will be when there is an exodus of migrants, especially if the exodus is proximate to the United States. The Cuban and Haitian migrants in 1994 are an example of this.⁶⁸ The issue for the military will be how to staunch the flow of migrants while other instruments of national power resolve the fundamental issues causing the migration.

IV. Is the Army Prepared?

This section will look at the U.S. Army's recent experience in resolving refugee issues to project how the Army is prepared to handle the migration issue. A common dictionary definition of refugee is one who flees to a foreign country from danger. This is not dissimilar from the common dictionary definition of migrant; one who moves from one country, place, or locality to another. In fact, refugee is a synonym for migrant and the refugee issue is synonymous with the migration issue.

Since 1970, when the United Nations reported 2.5 million refugees, the figure has increased to over 19 million by 1994.⁶⁹ Preventing the movement of refugees at the point of origin has usually required placing troops on the ground in conjunction with other efforts to ameliorate the crisis. Recent examples of this have been the peacekeeping operations in Bosnia and Haiti and the humanitarian relief operations in Rwanda and Northern Iraq. Having a troop presence on the ground allows for "...[P]roviding assistance to victims of ethnic conflict as close to their homes as possible, creating safe havens or secure areas where displaced persons can get help in relative safety, deploying troops to protect civilians

from violence or expulsions in some areas, and protecting relief workers caught in the crossfire between opposing sides."⁷⁰

The peacekeeping and humanitarian relief operations mentioned in the preceding paragraph have been something of a departure from prior peace operations for the U.S. Army. In years prior, the size of the U.S. Army commitment to such operations was limited. In contrast, recent peace operations have been in austere locations and of longer duration.⁷¹

In a recent General Accounting Office (GAO) study on the impact of peace operations, the GAO found the U.S. Army would be hard pressed to fulfill its mission under a two major regional conflict (MRC) scenario if it were engaged in a large peace operation.⁷² Concomitant with deploying ground forces to a peace operation is the deployment of Army combat support and combat service support forces. "The need to establish and provide continued infrastructure support for U.S. military forces, coalition forces, and the local population is the key reason support forces are needed in peace operations."⁷³ The U.S. Army has the unique capability among the services to provide support forces, however, many of these support units are in the reserves.⁷⁴

The percentages of selected U.S. Army support capabilities in the reserve force structure is as follows: quartermaster, 76%; engineer, 69%; transportation, 63%; psychological operations, 75%; and civil affairs, 97%.⁷⁵ Embedded in these percentages is the concept of calling up the reserves as units to support operations. This concept has not been consistently employed recently. Instead, the practice has been to use individual volunteers and to train and organize them into units.⁷⁶

When the U.S. Army has relied predominantly on the active component to provide the support capabilities for peace operations, the percentage of the active support capability employed has been high. During the peace operation in Somalia, the following types of support units, along with their percentage of the active force, deployed: general supply company, 100%; air terminal movement control detachment, 100%; petroleum supply company, 75%; medium truck company (petroleum), 67%; cargo transfer company, 67%; light-medium truck company, 60%; and water purification detachment (ROWPU), 50%.⁷⁷ Impacting on these significant percentages of the active support force deployed for the peace operation in Somalia was the practice of cross leveling soldiers

among support units. Since the mission required 100% fill for soldiers and their equipment, like or similar units provided the soldiers and equipment the deploying unit was lacking. This cross leveling occurred at both the division and corps level during the Somalia operation.⁷⁸

Given the U.S. Army's mission to defeat an opponent in a MRC, disengaging support forces from a large peace operation may be problematical. In addition to the issues of airlift capacity, retraining and restoring warfighting skills, and refurbishing equipment, many of the support units likely to be used in peace operations are required enable the deployment to the MRC.⁷⁹ Support units that sustain the combat units in a MRC are organized into Contingency Force Pools (CFP), consisting of seven packages.⁸⁰ The first three packages support the first MRC and the fourth package augments the theater support that sustains the combat forces deployed to the first MRC.⁸¹ Although U.S. Army planners try to avoid using support units in CFP 1-3, in large peace operations or multiple peace operations occurring simultaneously, this has not always been the case. The GAO found that during the Somalia peace operation, fifty percent of the support units in CFP 1-3 were employed.⁸²

Moreover, in certain types of CFP 1-3 units, 100 percent of the active CFP 1-3 support capability was deployed.⁸³

In the category of training, the 10th Mountain Division has found the need to conduct from three to six months of training to restore warfighting skills to subordinate units deployed on peace operations.⁸⁴ Skills employed during peace operations were not completely compatible with the training the unit would have received at a combat training center (CTC) such as the National Training Center. At a CTC, a support unit would sustain a combat unit in an environment similar to what they may experience in a MRC.

Equipment employed during peace operations must be refitted, potentially hindering expeditious redeployment from a peace operation to a MRC. Again citing the experience of the 10th Mountain Division during peace operations in Somalia, its UH-60 helicopters underwent depot level maintenance upon their return due to the severe environment and extended use.⁸⁵ Wear on equipment during long duration peace operations may cause necessary equipment to be unavailable for immediate redeployment to a MRC.

The preceding paragraphs in this chapter have demonstrated a central fallacy in the U.S. Army's strategy for defeating an

aggressor in two nearly simultaneous MRCs.⁸⁶ That strategy calls for the U.S. Army forces engaged in peace operations to immediately disengage and redeploy to the regional conflict.⁸⁷ Assuming aircraft are available to support the redeployment, the support forces necessary to sustain peace operations are in many cases the same support forces necessary for the MRC. Moreover, immediate redeployment is questionable since the U.S. Army's recent history in peace operations indicates support units cross level people and equipment, need some number of months to retrain on warfighting skills, and in some instances must refit their equipment.⁸⁸

V. Changes

Carl Von Clausewitz wrote in the early nineteenth century that, "It follows that the transformation of the art of war resulted from the transformation of politics."⁸⁹ Clausewitz was writing about the change in warfare brought on by the wars of the French revolution. Warfare ceased to be a limited occupation of professionals and became something waged by the nation in arms.

In a similar vein, Michael Howard has written about changes in the nature of warfare. "Some of the greatest changes in the nature of war have not been the result of technological innovation at all.

They have been the result of massive political, economic and social developments in the structure of society as a whole."⁹⁰ Howard goes on to list several of these changes: the rise of the mercenary infantryman and the corresponding fall of the mounted man at arms between the twelfth and fifteenth centuries; the beginning of limited professional warfare after the carnage of the Thirty Years War; and the rise of the nation in arms over the professional armies spawned by the French Revolution.⁹¹ In all these cases, Howard believes, one must examine the economic and social aspects of the times to explain what happened. Moreover, rarely is the scope of political, economic, and social change readily apparent to those at the time.⁹²

Describing change in the business arena, Peter M. Senge illustrates the difficulty of recognizing change with the parable of the boiled frog.

"If you place a frog in a pot of boiling water, it will immediately try to scramble out. But if you place the frog in room temperature water, and don't scare him, he'll stay put. Now if the pot sits on a heat source, and if you gradually turn up the temperature, something interesting happens. As the temperature rises from 70 to 80 degrees F., the frog will do nothing. In

fact, he will show every sign of enjoying himself. As the temperature gradually increases, the frog will become groggier and groggier, until he is unable to climb out of the pot. Though there is nothing restraining him, the frog will sit there and boil. Why? Because the frog's internal apparatus for sensing threats to survival is geared to sudden changes in his environment, not to slow, gradual changes."⁹³

Senge's parable of the boiled frog highlights the dilemma of the U.S. Army. The developed world that the U.S. Army's decision makers are connected to does not exhibit the signs of exorbitant population growth and economic stagnation. Many of the developing countries with these seemingly intractable problems are continents away. Moreover, these problems are projected to manifest themselves around the year 2025, and in any case, appear to be nonmilitary threats.

Paul Kennedy has written that as the world community becomes increasingly integrated, national security issues will come to be seen as international security issues. Security issues will not be defined by their military component, and "...[W]e may eventually come to agree that a threat to national security means anything on the globe which challenges a people's health, economic well-being,

social stability, and political peace."⁹⁴ As the developed world's economies become increasingly borderless, so will the nature of the developed world's security challenges.⁹⁵

The U.S. Army may find its mission difficult to achieve if it treats the challenges of population growth, and the attendant migration issue, as merely a scaled down version of conventional warfare. The U.S. Army's mission most probably will not be aimed at destroying enemy forces or capturing terrain. U.S. Army forces may instead find their mission to change an opponent's policy without resorting to violence. The changes population growth and migration may cause in the twenty-first century may require the U.S. Army to counter threats that are not within the bounds of traditional military objectives.

Writing in the Spring 1995 issue of the Joint Force Quarterly, Richard Szafranski notes that the U.S. military usually determines the function of its forces after determining their size.⁹⁶ While this may be reality, the nature of the threat from population growth in the twenty-first century will require U.S. Army forces capable of functions not currently available in large quantities.⁹⁷ Special operations forces seem to be a model for the type of functions

required to ameliorate the population growth and migration challenges of the next century. Additionally, combat support and combat service support units may execute the primary mission of the U.S. Army forces.⁹⁸

U.S. Army special operations forces (ARSOF) typically comprise Special Forces (SF), Psychological Operations Forces (PSYOP), and Civil Affairs units (CA).⁹⁹ Special Forces are capable of deploying quickly into austere areas and collecting human intelligence through surveillance and reconnaissance. Special Forces' language qualifications and knowledge of the culture within an area of operations can be important in collecting human intelligence. Language and culture skills also make Special Forces adept at liaison with the indigenous people, non governmental organizations, and local armed forces.¹⁰⁰ Special Forces are also capable of training and organizing indigenous security forces, as well as enhancing the ability of these security forces to operate with U.S. Army forces.¹⁰¹

Psychological Operations Forces provide the capability to influence the thoughts and attitudes of friendly, neutral, and hostile indigenous people through information.¹⁰² Like Special Forces,

PSYOP soldiers specialize in the languages and cultures of specific geographic areas. Where the military objective is to change peoples minds and behaviors, Psychological Operations Forces can present a consistent message congruent with the desired military objective. Psychological Operations Forces persuade rather than intimidate.¹⁰³

Civil Affairs units are capable of performing functions normally performed by governments.¹⁰⁴ Like the other special operations forces, CA soldiers specialize in regional languages and cultures. Civil Affairs units are the principal liaison between civilian government agencies, private organizations, non governmental organizations and the U.S. Army.¹⁰⁵ Civil Affairs units are particularly adept at assessing the needs of the local government and population, developing population and resource controls to satisfy the needs, and then coordinating with international relief agencies to ameliorate the need.¹⁰⁶

As described in the previous section, U.S. Army combat service support and combat support units enable U.S. Army forces to sustain themselves in operations below the threshold of war. However, U.S. Army combat service support and combat support units may do much more. These units are useful because of their capability to reduce

human suffering by relieving some of the causes for that suffering.¹⁰⁷ Known as peace building, providing the long term relief from economic and social problems may require U.S. Army combat service support and combat support units to augment the support efforts of civilian relief agencies.¹⁰⁸

As mentioned earlier, none of these forces are allocated in the force structure or have tables of organization and equipment designed for peace operations. Moreover, the U.S. Army field manual which addresses these issues, specifically states that training and preparing for operations below the threshold of war, "...[S]hould not detract from the unit's primary mission of training soldiers to fight and win wars."¹⁰⁹ The U.S. Army's force structure and training philosophy concerning these issues can best be expressed as just enough and just in time.¹¹⁰

Alvin and Heidi Toffler have written that as economies are transformed by the advances in information technologies, nations are necessarily giving up a portion of their sovereignty.¹¹¹ Yet it remains to be seen if the borderless world of information and economics will translate into a borderless world of labor. The idea that tens of thousands of people may migrate across national

borders to pursue the most lucrative labor market is probably not feasible in today's America.¹¹² The experience of the State of California with Proposition 187 and the U.S. reaction in 1994 to the Cuban and Haitian migrants being the most recent examples of the infeasibility of a borderless labor market. However, the press of population growth in the developing world and the increasing economic disparity with the developed world preclude the U.S. from simply stating that the growing number of poor people cannot cross national boundaries.¹¹³

Michael Howard has written, "The fundamental problem may not be, how we can provide more of X; how we can stretch our resources to provide additional quantities or develop a bigger and better X with longer range and better protection or greater speed. The basic question is, why do we need X anyway?"¹¹⁴ Having written these words in 1974, Michael Howard seems to have understood the course of events the U.S. Army is grappling with at the end of the twentieth century. The U.S. Army's approach to peace operations is to structure and train a force based upon mission, enemy, terrain, troops available, and time (METT-T).¹¹⁵ The primary consideration remains preparedness to fight and win wars, albeit with a digitized

array of weapons and command capabilities. This approach may be okay if the answer to Howard's basic question is that America's most dangerous threat remains conventional war in a regional contingency.

Michael Howard wrote these words at the same time he asked his basic question,

"I have the feeling, however -- which is no more than a hunch, an inherently unverifiable hypothesis -- that our military establishment is getting into the situation of the French and Burgundian chivalry in the 13th and 14th centuries and of the armies of the ancien regime at the end of the 18th century: highly professional, very dedicated and expert at their job (and, incidentally, so expensive to maintain that either the economy has to be distorted to provide anything of reasonable size or the forces must be pared down in quantity to the extreme limit); but, in some very fundamental sense, anachronistic."¹¹⁶

This is not to say the U.S. Army is witnessing the end of conventional war. Yet perceptibly, the U.S. President is indicating through the National Security Strategy the U.S. armed forces might be too expensive.¹¹⁷ Of the three central components of the U.S. President's national security strategy of engagement and

enlargement, only one refers to defense capability.¹¹⁸ Put differently, a reasonable person might conclude that the greater threat to nurturing democracy abroad and spurring global economic growth comes from population growth in the developing world. The Force XXI Army of the twenty-first century may seem anachronistic in the face of this threat.

VI. Conclusion

The sum of this paper is not an attempt to refute the necessity of preparing for conventional warfare. Rather, this paper recognizes the nature of the society we live in has as much to do with the nature of warfare as anything else. The world community is changing as America approaches the next century, and technology is a large contributor to that change. Like most things, some of the change is good, and some is less so.

Medical technology has conquered many diseases which once made human life much shorter than it is today. Information technology lets people all over the globe discover what is occurring in another part of the globe relatively instantaneously. In the aggregate, both of these modern technologies are good for the human

race. But they both portend unintended consequences that the U.S. Army will have to contend with in the next century.

As a consequence of medical technologies infant mortality rates have dramatically decreased throughout the developing and developed world at the same time life expectancy for adults has increased. This has contributed, along with some other causes, to an exponential growth in the world's population. This growth in the world's population is occurring in nations least able to provide economically for the growing population. A result is an increase in the number of very poor people on the planet.

As a consequence of information technologies people in what was once considered a remote part of the world know what is occurring around the globe. And those in the developed world know about them and their condition. People who earn the equivalent of a dollar a day know how those who earn a hundred dollars a day live. Moreover, those earning a dollar a day also have access to information, possibly in only a crude sense, indicating their countries are likely to experience sluggish economic growth for the next twenty to thirty years. These people can rationally be expected

to migrate toward the more prosperous spheres of the globe with the certain knowledge that life is better, if only somewhat so.

The disparity in GNP per capita between the developing world and the developed world is increasing. Moreover, the percentage of the world's resources which the developed world consumes to maintain its economies is also disparate to its percentage of the planet's population. Again, information technologies make it possible for the billions of people living in the developing world to know this fact. They may not know the discreet statistics the reader has access to, but in a general sense they will understand there is a large inequity in the economic status on the planet.

The U.S. Army can expect to become increasingly engaged in the attendant challenges population growth will present America and its developed world allies in the next century. Already at the end of this century the U.S. Army has deployed to Haiti to stem the flow of migrants to this country. Haiti is a harbinger of what the U.S. Army will have to confront in the third millennium.

The U.S. Army may find that in the next century, contrary to its current policy, forces will have to be structured and trained primarily for peace operations. This may entail moving force

structure from the U.S. Army Reserves to the Regular Army. Combat support and combat service support force structure currently in the U.S. Army Reserves may comprise the bulk of the forces involved in peace operations. Combat formations may only deploy for peace operations to secure the combat support and combat service support forces.

Similarly, special operations forces may be at a premium in peace operations. Specific language qualifications and cultural knowledge may become decisively important when the military objective is to change a peoples' attitude and behavior without intimidation. Like the support units, special operations forces may view the need to move force structure from the Army National Guard and U.S. Army Reserve to the Regular Army to support rapid deployment and long term missions.

An increase in the planet's population by nearly three billion people over the next thirty years, ninety-five percent of which will occur in the developing world, will have an effect on the way Americans live. Regardless of who leads America into the next century, they will take an oath of office to uphold the constitution. They must provide for the common defense and promote the general

welfare. This will entail working toward a solution of the planet's demographic dilemma. The U.S. Army will most likely have a significant role to play in any solution, if the U.S. Army's role in peace operations in the last decade of the twentieth-century is any indication.

The demographic environment of the world in the first decades of the twenty-first century is likely to have as great an impact on how Americans perceive their lives as any threat on the strategic horizon. The U.S. Army's relevancy to Americans may have little to do with destroying enemy formations or seizing ground. Instead, the U.S. Army's relevancy to Americans may have a lot to do with stemming the flow of economic migrants at their point of origin and preventing a disrupting number of economic migrants from reaching the United States.

Endnotes

¹ Bernard Brodie, Strategy in the Missile Age (The RAND Corporation, 1959; Princeton, NJ: Princeton University Press, 1971), 409. "A large part of the world in which we live seems headed towards an almost unavoidable disaster, that of uncontrolled population growth, with its familiar vicious circle of poverty making for the almost unrestrained procreation which keeps people desperately poor. Another great part seems to have escaped that danger entirely by increasing its productivity much faster than it increases its population, and by demonstrating its capacity to restrain population growth. It is the latter area, however, the one in which we Americans are lucky enough to live, which is subject to the greatest danger of destruction from nuclear bombs. The two parts of the world share in common the fact that the chief menace facing each of them is man-made. Do they also share in common a bemused helplessness before the fate which each of them seems to be facing?"

² Department of the Army, TRADOC PAM 525-5: Force XXI Operations (Fort Monroe, VA: Army Training and Doctrine Command, 1 August 1994), 1-1. "Even though in the mid-1990s no credible near-term threat exists..."

³ William J. Perry, Annual Report to the President and the Congress (Washington: U.S. Government Printing Office, February 1995), 7.

⁴ Michael Howard, "Military Science in an Age of Peace," RUSI, Journal of the Royal United Services Institute for Defence Studies 119 (March 1974): 4.

⁵ Department of the Army, America's Army of the 21st Century: Force XXI, Meeting the 21st Century Challenge (Fort Monroe, VA: Director, Louisiana Maneuvers Task Force, DACS-LM, Building 83, 15 March 1995), 8.

⁶ Ibid., 31. "Although we cannot be certain about our missions, we can guess from the character of the world today that the threat of war will not recede. In 2010 the Army must still be ready to fight and win the Nation's wars...By 2010, the battlefield will be 'digitized.' The incorporation of digital technology across all of our battlefield systems will give commanders unprecedented capability to gather and share tactical information. A task force commander will know the position of every vehicle in his unit, and that same information will be instantaneously available to his supporting and

flank units and any other unit in the sector. As the battle continues, supply vehicles will begin loading ammunition and repair parts tailored to unit requirements, because during the battle the onboard computers will have been automatically transmitting the pertinent data to the support base. Our soldiers will perform missions that have been thoroughly planned and rehearsed using advanced simulators and simulations."

⁷ U.S. President, A National Security Strategy of Engagement and Enlargement (Washington: The White House, February 1996), 14.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid., 26.

¹¹ Matthew Connelly and Paul Kennedy, "Must It Be the Rest Against the West?" The Atlantic Monthly 274 (December 1994): 72.

¹² Ibid. Interestingly, Connelly and Kennedy use the same population figure of 8.5 billion for the year 2025 as the President's 1995 National Security Strategy. Connelly and Kennedy expect world population growth to taper off after the year 2025 and stabilize by the year 2050 at the 10 to 11 billion figure, although they admit some estimates for population growth are much higher than they state.

¹³ Ibid. Also see. Paul Kennedy, Preparing for the Twenty-First Century (New York: Random House, 1993), 25. "China's total may rise only (!) from today's 1.13 billion to about 1.5 billion in 2025, whereas the faster-growing population of India may reach the same total from today's 853 million. Given the approximate nature of these statistics and possible changes in both the birth and death rates of the two countries, it is conceivable that India might possess the world's largest population in 2025 -- for the first time in recorded history -- and then eventually total 2 billion people."

¹⁴ Paul Kennedy, Preparing for the Twenty-First Century (New York: Random House, 1993), 25.

¹⁵ Connelly and Kennedy, "Must It Be the Rest Against the West?" 72. The implication in this is that by the early twenty-first century there will be more poor people on the planet than ever before.

¹⁶ Paul Kennedy, Preparing for the Twenty-First Century, 26. "Now 1.4 billion people are living in the urban areas of developing countries; there will be a crushing 4.1 billion in 2025. By that time Latin America will be the most urbanized region in the world, with

nearly 85 percent of its population living in cities; in Africa the figure will be around 58 percent and in Asia about 53 percent."

¹⁷ Connelly and Kennedy, 76. Connelly and Kennedy point out that today, Lagos contains 143,000 people per square mile, and Jakarta contains 130,000 people per square mile. By comparison, America's most populous city, New York, contains 23,700 people per square mile in its five boroughs.

¹⁸ Paul Kennedy, Preparing for the Twenty-First Century, 26.

¹⁹ Ibid., 25.

²⁰ Virginia Abernethy, "Optimism and Overpopulation" The Atlantic Monthly 274 (December 1994): 88.

²¹ Paul Kennedy, Preparing for the Twenty-First Century, 221.

²² Ibid., 31.

²³ Connelly and Kennedy, "Must It Be the Rest Against the West?" 76.

²⁴ Adam Walinsky, "The Crisis of Public Order" The Atlantic Monthly 276 (July 1995): 48. "Of the urban killers identified by the Department of Justice in 1988, 90 percent were male. Virtually none were aged fourteen or younger, but 16 percent were aged fifteen to nineteen, 24 percent were twenty to twenty-four, and 20 percent were twenty-five to twenty-nine." Walinsky provides these figures from the United States government about American young men living in one of the world's wealthy countries.

²⁵ Connelly and Kennedy, "Must It Be the Rest Against the West?"

76.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Al Gore, "Facing the Dual Challenges of Overpopulation and Underdevelopment," Foreign Policy Bulletin 5 (November-December 1994): 93.

³⁰ Jean-Marie Cour, "Population Trends and Economic Growth in Sub-Saharan Africa," in Involuntary Resettlement in Africa: World Bank Technical Paper 227, ed. Cynthia C. Cook (Washington: International Bank for Reconstruction and Development/The World Bank, 1994), 175.

³¹ Ibid.

³² Ibid.

³³ Richard U. Light, "Africa and the Limits to Growth: One Continent's Problems Could Soon be Those of the World," The

Humanist 46 (July-August 1986): 29. Also see. Carl G. Jacobsen, Morris Miller, Metta Spencer, and Eric L. Tollefson, eds. World Security: The New Challenge (Toronto: Dundurn Press Limited, 1994), 131-132. "The built-in inertia to changing the growth rate is illustrated by the fact that currently 48% of Sub-Saharan Africans are aged below 15, and in order to stabilize the population they would have to have one-child families for the next 30 years. Latin America and Asia with 37% of the population below 15, would require 25 years of one-child families to stabilize."

³⁴ Paul Kennedy, Preparing for the Twenty-First Century, 25.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

³⁸ The World Bank, World Tables 1995, (Baltimore, MD: Johns Hopkins University Press, May 1995), viii.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Allen C. Kelley and Robert M. Schmidt, "Population and Income Change: Recent Evidence," World Bank Discussion Papers 249 (Washington: International Bank for Reconstruction and Development/The World Bank, August 1994), 82.

⁴² Ibid., 80.

⁴³ Ibid., 82.

⁴⁴ Roy Laishley, "World Bank Says Adjustment Works," Africa Recovery 7 (December 1993-March 1994): 16.

⁴⁵ Tim Wall, "Africa Agenda Needs Stronger Support: UN," Africa Recovery 7 (December 1993-March 1994): 36. The goal was an average growth rate of six percent GDP per year during the 1990s. Also see. Light, "Africa and the Limits to Growth: One Continent's Problems Could Soon be Those of the World," 29. "In Africa in 1985, the birth rate was forty-seven per thousand and the death rate was seventeen per thousand. The resulting annual growth rate is 3 percent, a rate that will cause the African population to double in twenty-four years.

⁴⁶ Ibid.

⁴⁷ William Petersen, "The Social Roots of Hunger and Overpopulation," The Public Interest (Summer 1982): 52.

⁴⁸ Richard M. Nixon, Real Peace (Boston: Little, Brown, 1984), 73.

⁴⁹ Paul Kennedy, Preparing for the Twenty-First Century, 52. Also see page 62.

⁵⁰ Richard M. Nixon, Real Peace, 74.

⁵¹ Carl G. Jacobsen, Morris Miller, Metta Spencer, and Eric L. Tollefson, eds. World Security: The New Challenge (Toronto: Dundurn Press Limited, 1994), 182.

⁵² *Ibid.*

⁵³ *Ibid.* These figures do not count deaths from drought and war in places like Somalia, Sudan, and Bosnia.

⁵⁴ The World Bank, World Tables 1995, 2-5.

⁵⁵ Connelly and Kennedy, "Must It Be the Rest Against the West?" 76. "Together Europe and North America, which contained more than 22 percent of the world's population in 1950, will contain less than 10 percent by 2025." Also see. Carl G. Jacobsen, Morris Miller, Metta Spencer, and Eric L. Tollefson, eds. World Security: The New Challenge, 136. "Finally it should be emphasized that problems arising from population growth are not limited to the developing countries of the South, but the North also is grossly overpopulated because of its current consumption of 85% of world resources and production of an equivalent proportion of pollution and waste of all kinds."

⁵⁶ Carl G. Jacobsen, Morris Miller, Metta Spencer, and Eric L. Tollefson, eds. World Security: The New Challenge, 136.

⁵⁷ *Ibid.*, 135.

⁵⁸ William J. Weinberg, War on the Land: Ecology and Politics in Central America (London: Zed Books Ltd., 1991), 156.

⁵⁹ *Ibid.*, 158. "For decades U.S. propaganda has boasted of a nation with 'the world's highest standard of living,' and used this boast as evidence of the inherent superiority of the Western corporate capitalist system over the communist rivals in the east. As a result, almost all the world today -- from the villages of Guatemala to the shipyards of Poland -- aspires to achieve this standard of living. Yet, if we live in a world where six percent of the population consumes over 40 percent of the resources, simple mathematics demonstrate the impossibility of peoples of the entire planet sharing the standard of living enjoyed by many (but not all) U.S. citizens."

⁶⁰ Connelly and Kennedy, "Must It Be the Rest Against the West?" 62.

⁶¹ William B. Wood, "Ecomigration -- Linkages Between Environmental Change and Migration," Office of The Geographer and Global Issues, U.S. Department of State, 27 November 1995, <http://cssc.newschool.edu/wood.htm>

⁶² Jean-Marie Cour, "Population Trends and Economic Growth in Sub-Saharan Africa," 176. "International migrations...are not well-known because they are most often carried out in a clandestine manner, and people prefer not to know about them. But after the fact, one is forced to acknowledge their importance." Also see. Connelly and Kennedy, "Must It Be the Rest Against the West?" 69. "Paul Craig Roberts's figure of an 'estimated' three million illegal aliens who find their way into the United States each year is much higher than other guesses we've seen."

⁶³ Mary M. Kritz, "Population Growth and International Migration: Is There a Link?" Population and Development Program, Cornell University, September 1995, <http://cssc.newschool.edu/kritzpap.htm>

⁶⁴ Institute for National Strategic Studies, Strategic Assessment 1995: U.S. Security Challenges in Transition, ed. Hans Binnedijk (Washington: U.S. Government Printing Office, 1995), 91.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid., 180.

⁶⁸ William J. Perry, Annual Report to the President and the Congress, 23. "Operations undertaken by the U.S. armed forces facilitated refugee and migrant processing, refugee camp construction, and camp management in response to the Haitian and Cuban migration emergencies."

⁶⁹ Institute for National Strategic Studies, Strategic Assessment 1995: U.S. Security Challenges in Transition, 178.

⁷⁰ Ibid., 186.

⁷¹ United States General Accounting Office, Peace Operations: Heavy Use of Key Capabilities May Affect Response to Regional Conflicts, (Washington: Superintendent of Documents, 8 March 1995), 12.

⁷² Ibid., 50. "Forces with capabilities that exist in limited numbers in the active Army and would be needed in the early stages of a MRC have been used repeatedly in peace operations. Similar-type units that are not engaged in peace operations may not be able to respond quickly or effectively to MRCs because they are assigned fewer people than authorized and they may have loaned some people to the

units engaged in the peace operations, which exacerbates an already difficult situation.”

⁷³ Ibid., 17. Also see pages 17-18. “The type and amount of support differs with each operation, depending on the mission and the nature of the operating environment. Peace operations often occur in austere locations where there is limited electric power, roads, water, port facilities, and air fields. As such, support forces have played an important role in establishing and sustaining a working infrastructure, not only for U.S. forces but also for coalition forces and the local population. In Somalia, for example, the Army encountered an environment completely devoid of any useful infrastructure and had to refurbish or build even the most basic of facilities. If nation building is part of the military mission, support forces are additionally burdened with tasks such as building schools, hospitals, and local housing and establishing police and other civil administration services.”

⁷⁴ Ibid., 20. Also see page 8. “The President called up approximately 1,900 reservists to support the September 1994 military intervention in Haiti. Prior to that call-up, the President’s Selected Reserve Call-Up Authority had been invoked only once since its 1976 enactment -- for the Gulf War. Reserves were not called up for the operations in Grenada in 1983, Panama in 1989, and Somalia in 1992.”

⁷⁵ Ibid., 23.

⁷⁶ Ibid., 24. “For example, when Army planners needed a postal unit for operations in Somalia, they created a unit from available volunteers. This process proved to be time-consuming, taking 1 month to create a 49-person postal unit.”

⁷⁷ Ibid., 21.

⁷⁸ Ibid., 22. “For instance, the 210th Forward Support Battalion, an element of the 10th Mountain Division, took people and equipment from the Division’s 46th Forward Support Battalion and the 710th Main Support Battalion before deploying to Somalia. The 710th Main Support Battalion also supported the 46th Forward Support Battalion’s deployment, thereby creating a domino effect within the 10th Mountain Division. According to the 710th commander, the battalion deployed with fewer than all its people and equipment. Thus, the remaining people were burdened to make do with less.”

Also see on page 22. “Most units did not have the people, and many

did not have the equipment to satisfy this requirement. For example, almost half of the XVIII Airborne Corps' First Corps Support Command units were authorized 90 percent or less of their authorized people, and several support units were authorized 80 percent or less of their authorized people. Other corps support commands, such as the Third Corps' which provided initial corps support for operations in Somalia, are resourced at an even lower level than the XVIII Airborne Corps.⁷⁹

⁷⁹ Ibid., 47. "Another challenge that would be encountered is that certain Army contingency support forces (such as port handlers, air and sea movement control personnel, and petroleum handlers) needed in the early days of a MRC, would still be needed within the peace operation theater to facilitate the disengagement and redeployment. As a result of our analysis comparing support capabilities needed in the first 30 days of a MRC with contingency support capabilities deployed to Somalia, we found that in some cases 100 percent of some of these active component support forces were used in the Somalia peace operation. Had a MRC arisen during this time, immediate access to reserve component forces would have been necessary."

⁸⁰ Ibid., 42.

⁸¹ Ibid., 42-43.

⁸² Ibid., 43. Specifically, 92 percent of quartermaster forces, 69 percent of engineer support forces, 64 percent of miscellaneous support forces, and 65 percent of transportation forces deployed to Somalia were CFP 1-3 units."

⁸³ Ibid., 44. The active CFP 1-3 capability completely deployed to Somalia by type unit was as follows: general supply company, 100%; air terminal movement control detachment, 100%; medium truck company (petroleum), 100%; cargo transfer company, 100%; and water purification detachment (ROWPU), 100%.

⁸⁴ Ibid., 47.

⁸⁵ Ibid., 48.

⁸⁶ Ibid., 41. "In 1993, the Secretary of Defense conducted the bottom-up review, a reassessment of U.S. defense requirements. This review, completed in October 1993, examined the nation's defense strategy, force structure, modernization, infrastructure, foundations, and resources needed for the post-Cold war era. The Secretary's report on the bottom-up review outlined the new

dangers facing the U.S. interests, chief among them being regional aggression. To deal with regional aggression and other regional dangers, DOD strategy is to (1) defeat aggressors in MRCs; (2) maintain overseas presence to deter conflicts and provide regional stability; and (3) conduct smaller scale intervention operations, such as peacekeeping, humanitarian assistance, and disaster relief. To deal with regional aggression, DOD concluded that it is prudent for the United States to maintain sufficient military power to fight and win two MRCs that occur nearly simultaneously. According to the report on the bottom-up review, while deterring and defeating major regional aggression will be the most demanding requirement of the new defense strategy, U.S. military forces are more likely to be involved in operations short of declared or intense warfare. The forces responding to these other operations will be provided largely by the same collection of general purpose forces needed for MRCs and overseas presence.”

⁸⁷ Ibid., 41-42. “DOD’s report on the bottom-up review states that if a MRC occurs, DOD will deploy a substantial portion of its forces stationed in the United States and draw on forces assigned to overseas presence missions. Unless needed for the conflict, other forces that are engaged in smaller scale operations like peacekeeping will remain so engaged. If a second conflict breaks out, the bottom-up review envisioned that DOD would need to deploy another block of forces, requiring a further reallocation of overseas presence forces, any forces still engaged in smaller scale operations, and most of the remaining U.S.-based forces. In determining force requirements for the two-conflict strategy, DOD assumed that forces already engaged in peace operations could rapidly redeploy to a regional conflict.”

⁸⁸ Ibid., 55. “On another matter, however, we believe that because of the Army’s significantly reduced size of the staffing of support forces at 10 to 20 percent below their authorized levels needs to be reassessed.” Also see page 54. “The alternative to using defense resources differently is to accept the status quo and so continue to treat peace operations as a secondary mission. The risk of accepting the status quo is that it would continue the strain on the military as a result of its participation in peace operations and could adversely affect the military’s ability to respond to a MRC if one should occur

while military forces were engaged in a sizable peace operation or several smaller ones."

⁸⁹ Carl Von Clausewitz, On War, ed. and trans. by Michael Howard and Peter Paret (Princeton NJ: Princeton University Press, 1984), 610.

⁹⁰ Howard, "Military Science in an Age of Peace," 8.

⁹¹ Ibid. "Take the end of medieval warfare, the down-grading of the mounted man at arms who dominated society and war in the early Middle Ages, the rise to effectiveness of the mercenary infantryman armed basically with weapons as simple as the pike or bow. This change owed very little to such technical developments as gunpowder. It owed far more to social and economic developments in Western Europe between the 12th and 15th centuries, of a far more sweeping kind. Then take the next great transformation in the nature of war, that at the end of the 18th century when the wars of the French Revolution ended warfare as a limited occupation for professionals and ushered in the age of the nation in arms. This occurred at a time when weapons technology had been in essentials static since the introduction of the flintlock a century earlier. And indeed take the beginning of this period of limited professional warfare after the Thirty Year's War, when the sprawling holocausts of that conflict, burnt themselves out and war became a matter for experts."

⁹² Ibid. "The trouble is that it is almost impossible to appreciate the existence and the implications of these great historical movements at the time. It is only in perspective afterwards that men appreciate the nature of the changes through which they have lived. At the end of the 18th century, when the French revolutionary wars were beginning to get under way, the great German military reformer Scharnhorst had some remarkable insights into the implications of the Revolution; but it took his pupil Clausewitz 20 years of hard thinking to explain why it was that the Prussian Army, the finest of its epoch, had been swept away by an army inferior to it by every standard of the time."

⁹³ Peter M. Senge, The Fifth Discipline: The Art and Practice of The Learning Organization (New York: Currency Doubleday, 1994), 22.

⁹⁴ Paul Kennedy, Preparing for the Twenty-First Century, 130.

⁹⁵ Robert B. Reich, The Work of Nations (New York: Vintage Books, 1992), 320. "...the global economy is tightly linking our citizens to the citizens of other nations -- linkages as strong as, if not

stronger than, the economic connections binding us to one another within our own borders.

⁹⁶ Richard Szafranski, "When Waves Collide: Future Conflict," Joint Force Quarterly 7 (Spring 1995): 81. "If you are a military realist it should not seem odd to define forces and discuss them before determining the conflicts which they will face. If you are not a realist, however, consider the facts. America usually defines the functions of forces after fixing their size and form. Strategy -- or what passes for it -- also follows the budget determinations on the size of forces which the services then try to shape separately. It is illusory to expect anything else. But in the future the United States must better rationalize its forces because of the different kinds of conflict that will arise."

⁹⁷ Department of the Army, FM 100-20: Operations Other Than War (Final Draft), (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 25 September 1995), 3-3. "Task organization is important in any operation; OOTW is no different. What is different, however, is that units are neither allocated in the force structure nor the tables of organization and equipment (TOEs) developed or modified based on OOTW missions."

⁹⁸ Department of the Army, FM 100-23: Peace Operations, (Washington: U.S. Government Printing Office, December 1994), 31.

⁹⁹ *Ibid.*, 40.

¹⁰⁰ *Ibid.*, 30. "Language qualifications and knowledge of the doctrine, capabilities, procedures, and culture of their organizations are extremely important for LNOs. CA or special operations forces (SOF) teams may be available to serve as LNOs."

¹⁰¹ *Ibid.*, 40.

¹⁰² Department of the Army, FM 100-20: Operations Other Than War (Final Draft), 2-19.

¹⁰³ Department of the Army, FM 100-23: Peace Operations, 40.

¹⁰⁴ *Ibid.*

¹⁰⁵ Department of the Army, FM 100-20: Operations Other Than War (Final Draft), 2-19.

¹⁰⁶ Department of the Army, FM 100-23: Peace Operations, 40.

¹⁰⁷ Department of the Army, FM 100-20: Operations Other Than War (Final Draft), 2-16.

¹⁰⁸ *Ibid.*, 2-17.

¹⁰⁹ *Ibid.*, 3-1.

¹¹⁰ Ibid.

¹¹¹ Alvin and Heidi Toffler, War and Anti-War: Survival at the Dawn of the 21st Century, (Boston: Little, Brown and Company, 1993), 24. “...the poets and intellectuals of Third Wave states sing the virtues of a ‘borderless’ world.”

¹¹² U.S. President, A National Security Strategy of Engagement and Enlargement, 3. “Large-scale migration from Haiti has been stemmed because we gave democracy another chance in that nation. In the months before we forced the military rulers to step down, 16,000 Haitians fled their country for our shores and elsewhere in the region. Three months after the intervention, the refugee flow was practically zero.” Also see page 4. “...the flood of Haitian refugees at our borders would have continued had we not intervened in that country...”

¹¹³ Alvin and Heidi Toffler, War and Anti-War: Survival at the Dawn of the 21st Century, 23. “Complete de-coupling is impossible, however, since it is not possible to stop pollution, disease, and immigration from penetrating the borders of the Third Wave countries.

¹¹⁴ Howard, “Military Science in an Age of Peace,” 6.

¹¹⁵ Department of the Army, FM 100-20: Operations Other Than War (Final Draft), 5-11. “The structure of the peacekeeping forces is based on METT-T, as modified by political considerations. Ultimately force structure is a political decision and is described in the TOR. The conditions likely to produce renewed violence and its potential level assist in determining appropriate force design. The structure of a peacekeeping force can range from military police and light infantry to armored cavalry, mechanized, or armored formations. Aviation may be required for both combat and support functions. Administrative and logistics support to US and other national contingents is provided in accordance with agreements. In some cases, the peacekeeping force may be structured to exercise police functions. If an air threat exists, air defense units may be required. When structuring forces, planners must also provide for civil affairs capabilities and language-proficient individuals.”

¹¹⁶ Howard, “Military Science in an Age of Peace,” 8.

¹¹⁷ U.S. President, A National Security Strategy of Engagement and Enlargement, 14. “The forces the Administration fields today are sufficient, in concert with regional allies, to defeat aggression in

two nearly simultaneous major regional conflicts.” Also see. U.S. President, A National Security Strategy of Engagement and Enlargement, (Washington: The White House, February 1995), 9.

“With programmed enhancements, the forces the Administration is fielding will be sufficient to help defeat aggression in two nearly simultaneous major regional conflicts.” These two sentences come from nearly identical paragraphs in the 1996 and 1995 National Security Strategy. The difference between the two years is that in the 1996 version the National Security Strategy explicitly states the U.S. will be able to defeat aggression in two nearly simultaneous major regional conflicts “in concert with regional allies.” This seems to suggest the U.S. might not need to fund the U.S. military to a level required to fight and win two nearly simultaneous major regional conflicts.

¹¹⁸ U.S. President, A National Security Strategy of Engagement and Enlargement, 3. “To that broad end, the three central components of our strategy of engagement and enlargement are: (1) our efforts to enhance our security by maintaining a strong defense capability and employing effective diplomacy to promote cooperative security measures; (2) our work to open foreign markets and spur global economic growth; and (3) our promotion of democracy abroad.”

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